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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/928,339	08/14/2001	Tokuju Oikawa	2870-0171P	6675
2292	7590	07/14/2004	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			CHEA, THORL	
			ART UNIT	PAPER NUMBER
			1752	

DATE MAILED: 07/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/928,339	OIKAWA, TOKUJU	
	Examiner	Art Unit	
	Thorl Chea	1752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. This office action is responsive to the communication on May 11, 2004. The office action shown below was issued on March 15, 2003 before the extension time expired such as pointed out by the applicants in their remarks. Accordingly, the office action on March 15, 2004 in the response to the Request for Continuation Examination (RCE) on February 12, 2004 is issue in this office action, and provided below for the applicants' convenience.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-16, 18-20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Japanese Patent N0. 112072 (JP'072).

The JP'072 discloses a photothermographic material contains a compound of formula (1), (2) and (3) in condition (I) and the compound of formula (II) claimed in the present claimed

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invention. See claims 1-4; paragraph [0098] to [0100] and Table 1 in paragraph [0285]. The samples 12-14 contain NaOH as pH modifier. Thus, the samples contain no NH_4^+ which is within the scope of 0.06 mmol/m^2 claims in the present claimed invention; the samples 6-11, 18-25 contains ammonium hydroxide which meet the limitation in condition "do not substantially contains" ammonia (i.e. NH_3). Therefore, the invention as claimed lacks novelty. Alternatively, it would have been obvious to the worker of ordinary skill in the art at the time the invention was made to a known acid or base discloses in JP'072, paragraphs [0098] to [0100] to adjust the film surface pH of 5.5 or less to provide an invention with similar pH. The results presented in Table 1, [0285] shows low Dmin, sufficient shelf life in which Dmax is high. The worker of ordinary skill in the art would have to a base or an acid to control the film surface pH within this range with an expectation of achieving a material with highly improved fogging, low Dmin and high Dmax.

5. Claims 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent N0. 112072 (JP'072) as applied to claims 1-16, 18-20 above, and further in view of Ito et al and EP' 1096310. Ito et al in column 82 lines 16-30 discloses phosphorus oxide-derive compound as contrast enhancer for a photothermographic material. See also EP'310 on page 79, claim 8, and the control of film surface pH on page 52, paragraph [0200].

It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the phosphorus oxide-derive compound taught in Ito et al and EP'310 as contrast enhancer for the material of JP'072, and thereby provide a material as claimed.

6. The objection to the specification set forth in the previous office action is withdrawn. The amendment raises no new matter to the specification.

Response to Arguments

7. Applicant's arguments filed February 12, 2004 have been fully considered but they are not persuasive because of new ground of rejection using a complete computer base translation of the publication number 2000-112072 set forth above and cited in the Form PTO-892.

The Declarations under 37 CFR 1.132 are irrelevant to the rejection under 35 USC 102. "(E)vidence of secondary considerations, such as unexpected results or commercial success, is irrelevant to 35 U.S.C 102 rejections and thus cannot overcome a rejection so based. In re Wiggins, 488 F.2d 538, 543, 179 USPQ 421, 425 (CCPA 1973). The amount of 0.06 mmol/m² or less encompasses the range of 0. to 0.06 mmol/m² and this amount is inherent to the type of acid or base used in controlling the pH surface taught in the '072 document. The pH of the material in table 1 of the '072 document is asserted to be relatively constant in the absence of showing otherwise. It would have been understood by the worker of ordinary skill in the art that the surface of the film pH should be maintained within the preferred range of less than 5.5 disclosed in '072 document, [0098] to [0099] to maintain the material in good condition.

The Declaration under 37 CFR 1.132 on May 11, 2004 is irrelevant to the material taught in the publication number 2000-112072, but to the US Patent No. 6,110,022 and US Patent 6,165,707. See the statement on page 2 of the Declaration.

The condition I in claim 1 is directed to the use of the compound of formula (1) to (3) and the NH₄⁺ in all layers formed on the image forming side of the support is 0.06 mmol/m² or less, and the condition II is the film pH of the image-forming layer side is substantially unchanged after coating in combination of formula (A), and nucleating agent.

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The publication number 2000-112072 discloses the compound of formula (A) to provide a heat developable material with low fog, high maximum density and less liable to the rise of fog in preservation by using a latex of a specified polymer; the compounds of formula (1) to (3) are nucleating agent used to improve the contrast of the image of heat developable material; the pH of the heat developable is 6 or less. See abstract, paragraph [0013] to [0019], Table 1 in paragraph [0285]. Publication number 2000-112072 used the ammonium to control the pH of the material to provide the pH of less than 6.8 and the material provide Max as high as 4.7 and Dmin as low as 0.12. The values of Dmin and Dmax are better than those presented in the Declaration.

The amount ammonium ion presented in the claimed invention is considered as inherent product form the process of formation of polymer latex or ammonium hydroxide use to modify the pH of the material. It provides no beneficial property to the claimed material. There is no different in results between the latex taught in the prior art of record such as shown in Table 1 of the publication number 2000-112072. Also, the worker of ordinary skill in the art would have maintained the pH value within the range exemplified such as taught in Table 2 of the publication number 2000-112072 to provide the material with Dmin and Dmax shown therein.

The applicants argue in the Declaration that "SBR latex used as binder for image-forming layer in Example 1 described in the present disclosure of the present application, has glass transition of 17 °C, was prepared by polymerization using $K_2S_2O_8$ as polymerization initiator, and does not contains NH_4OH modifier". However, the applicants do not claim the latex or any type of initiator presented in the argument.


Conclusion

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thorl Chea whose telephone number is (571)272-1328. The examiner can normally be reached on M-F (9:00 - 5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark F. Huff can be reached on (571)272-1385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tchea 
March 4, 2004

Thorl Chea
Primary Examiner
Art Unit 1752

